Local Project Administration

Certification Course Manual
&
Reference Guide

February 2005

Utilities

Utility Coordination Process

The following outlines a typical utility coordination process as it relates to a project development process funded with state and/or federal dollars administered through the Maine Department of Transportation (hereinafter "Department"). Any references to a "Utility Coordinator" refer to the person who is responsible for assuring that proper utility and railroad coordination occurs on a given project. This may be a MaineDOT employee, a town/city employee, or a consultant acting on behalf of either party. Any references to Letters #1-7 refer to standard letters that are routinely mailed out to utility or railroad companies at a particular stage of a project. Templates of these letters are available on the Department's Utilities Web Site, located at the following address: *http://wwwmaine.gov/mdot/utilities/coordpage.php*

General Utility Coordinator Responsibilities:

- The Utility Coordinator will participate as an active member of the project team.
- The Utility Coordinator will meet with utility and railroad (hereinafter "RR") contacts as necessary to identify and resolve all utility and railroad issues and/or conflicts relating to the project and the Department's current policies.
- The Utility Coordinator will provide information to utility and railroad contacts as early as possible to provide the maximum notice possible.
- If the Utility Coordinator is a consultant working for the Department, the Utility Coordinator shall keep a predefined Department representative informed of all coordination activities by:
    - Copying that individual on all utility/RR related project correspondence, and
    - Inviting that individual to critical utility/RR coordination meetings.

This predefined contact will be responsible for providing general oversight of the coordination process and for the review and processing of any necessary utility/RR agreements to be signed by the Department.

General Utility Coordination Process:

I. Identify Utilities

II. Verify Facility Information

III. Preliminary Utility Comments, Conflicts, and Relocation Strategy

IV. Identify Specific Underground Facility Locations

V. Final Facility Impacts, Relocation Strategy and Agreements

VI. Prepare Utility Specification and Certification

VII. Oversee Utility Relocation Schedule

Detailed Utility Coordination Process

I. Identify Utilities

Project Kickoff:

- The Utility Coordinator will research the Department's utility and railroad database to obtain a list of contact names, addresses and phone numbers for all utility and railroad companies located in the City/Town of the proposed project. This information may be obtained from the Department's Utilities Web Site at the following address: *http://wwwmaine.govs/mdot/utilities/pdf/utiltown.pdf*
- The Utility Coordinator will obtain a list of contact names, addresses, and phone numbers for any applicable municipal officials in the project town(s).
- The Utility Coordinator will mail an initial utility contact letter (Letter #1) to all utilities, railroads and municipalities within the City/Town of the proposed project to determine the following:
  - Whether or not the addressee has existing facilities within the project area and, if so, the type of facilities;
  - Whether or not the addressee intends to construct facilities within the project area over the next five years;
  - The name of the individual that will be available to mark any existing facilities prior to the project survey;
  - The name of the individual with whom the project team can coordinate throughout the project.

Compile Preliminary Data:

- The Utility Coordinator will research the Department's accident data for any issues relating to the location of utility facilities. This information may be obtained from the Project Manager or from the Department's Traffic Engineering Division (624-3620).
- The Utility Coordinator will coordinate with the project team's Right-of-Way representative to obtain any available right-of-way information.
- The Utility Coordinator will determine whether or not there are any Department-owned traffic facilities within the project limits and will determine how those facilities will be handled throughout the development of the project. If the traffic facilities will not be modified as part of the project contract, the Utility Coordinator shall coordinate with a Department traffic representative as though they were a separate utility throughout the project. A list of the Department's traffic facilities is available at: *http://www.maine.gov/mdot/traffic-counts/equip-loc-town.php*
- For any railroad crossings, the Utility Coordinator will communicate with the Department's Multimodal Program (624-3420) to determine if any work is planned for the crossing in concern. If the railroad corridor is owned by the State of Maine, similar communication shall also occur with the Department's Office of Freight (624-3560).

Initial Field Review:

- The Utility Coordinator will make an initial site visit to identify (with documentation and photographs as necessary) the following:
  - Visible utility facilities on the project;
  - Typical offset of the utility poles;
  - Whether all of the appropriate utilities were contacted with the initial utility contact letter (Letter #1);
  - Features that may affect/limit utility relocations (i.e. buildings close to the highway, shade trees, etc…);

- Major utility installations that may be costly to relocate (i.e. substations, critical poles, telephone switching stations, pump stations, etc…);
- Utility facilities that may be located on their own easements;
- Proximity of any RR corridors to the project and the status and condition of any RR crossings;
- Overhead clearance issues around bridges or major drainage structures;
- Any other pertinent information.

Initial Team Meeting

- The Utility Coordinator will attend the Initial Team Meeting and provide a summary of the critical issues identified in the previous steps. If the Initial Team Meeting occurs before the above-mentioned work, a summary of critical issues shall be distributed to the team after-the-fact.
- If applicable, the Utility Coordinator will provide a proposed budget to complete the utility and railroad coordination for the project within the time frame identified at the meeting.

II. Verify Facility Information

Preliminary Public Meeting/Survey Plan Available:

- The Utility Coordinator will attend the Preliminary Public Meeting as applicable on projects where significant utility or railroad involvement is anticipated or when requested by the Project Manager.
- The Utility Coordinator will mail copies of the existing topographic survey plans (which may or may not include an initial proposed horizontal and vertical alignment) to all utility and railroad contacts for their review and comment. A letter shall accompany the survey plans requesting verification of the existing facilities indicated on the plan and any concerns that may exist (Letter #2).
- The Utility Coordinator will coordinate with the project team's Survey representative for any additional survey identified from the Letter #2 mailing.

III. Prelim. Utility Comments, Conflicts, and Relocation Strategy

Horizontal/Vertical Alignment Available:

- When the centerline of the highway is to be modified, the Utility Coordinator will distribute plans indicating the proposed horizontal and vertical alignment to all affected utilities and railroads within the proposed project for their comments (if not addressed with the survey plan distribution).
- If the RR or utilities express alignment concerns, the Utility Coordinator shall provide a written summary of those concerns to the Project Manager and other team members as applicable. The Utility Coordinator is responsible for assuring that all concerns are addressed to a conclusion and that all parties are aware of what the conclusion is.

Preliminary Plan Available/ Formal Public Contact:

- The Utility Coordinator will write a summary of the utility and railroad issues associated with the proposed project and submit them to the Project Manager for inclusion in the Preliminary Design Report (PDR).
- Depending upon the extent of the utility and/or RR work, the Utility Coordinator will meet with or, at least, communicate with the utilities to identify how utility work will generally be undertaken. Discussions shall include the right-of-way needs to accommodate the utility facilities.
- The Utility Coordinator will work with the project team to determine the proposed right-of-way limits/needs.

- The Utility Coordinator will attend the Preliminary Public Meeting as required. (Factors that will require the Utility Coordinator's attendance at the preliminary public meeting include: extensive utility relocation, significant trimming or shade tree removal necessitated by the utilities, utility impacts on a controversial right-of-way width, or requests by the Project Manager for utility representation).
- The Utility Coordinator will distribute preliminary plans to the utilities & railroads for a more detailed determination of impacts (Letter #3). As a result of the preliminary plan distribution, the Utility Coordinator will determine the need for any agreements with the railroad(s) or utilities.

IV. Identify Specific Underground Facility Locations

Drainage Plans Available

- The Utility Coordinator shall identify locations where utility test pits are required to obtain the specific depth of underground facilities that may conflict with the proposed design. The Utility Coordinator shall review the proposed test pit locations with the project team and then coordinate with the utilities and Survey for the work to be accomplished.

V. Final Facility Impacts, Relocation Strategy and Agreements

75%-80% Plans Available/Precoordination Meeting:

- The Utility Coordinator will provide all affected utility and railroad companies with 75% - 80% plans for review and comment (Letter #4).
- The Utility Coordinator will hold and moderate a Utility Precoordination Meeting to review utility and railroad impacts and relocations in the field and to discuss proposed schedules for the relocations (Letter #4).
- Following the Precoordination Meeting, the Utility Coordinator will prepare and distribute written minutes from the Precoordination Meeting, including any significant comments from the affected utility or railroad companies.
- The Utility Coordinator will prepare and distribute the draft railroad and utility Special Provisions (Letter #5).
- The Utility Coordinator will prepare any draft agreements and initiate the agreement approval process.

VI. Prepare Utility Specification and Certification

Project to Contracts:

- The Utility Coordinator will provide the final railroad and utility Special Provisions to the Project Manager with a certification that all necessary arrangements have been made. A template certification form is available at: *http://wwwmaine.govs/mdot/utilities/coordination/certfication.php*
- The Utility Coordinator will fill out a "Location Permit for Projects" form to document the approved utility locations resulting from the utility coordination process. This form may be found at *http://www.maine.gov/mdot/utilities/coordination/projperm.php* and is to be sent to the address indicated on the form with all associated attachments.
- If the Utility Coordinator needs to authorize utilities to relocate facilities well before project advertising, the Utility Coordinator should consult with the Utility & Railroad Services Manager to see if the Department should issue a "Letter of Premature Investment" (LOPI) to all affected utilities.

Advertise and Award:

- The Utility Coordinator will provide guidance to the Project Manager to resolve questions from contractors relating to railroads and utilities during the bidding phase of the project.

VII. Oversee Utility Relocation Schedule

Preconstruction:

- Upon notification from the Department's Construction Resident of a Preconstruction Meeting, the Utility Coordinator shall schedule a joint Preconstruction Utility Meeting with the affected utilities and railroad(s) (Letter #6).
- The Utility Coordinator will attend the Preconstruction Meeting and chair the joint Preconstruction Utility Meeting to coordinate the utility schedules with the Contractor's schedule.
- Following the Preconstruction Utility Meeting, the Utility Coordinator shall prepare and distribute written minutes to all utilities and railroads on the project, the Contractor, and the Construction Resident (Letter #7).

Construction:

- The Utility Coordinator will work directly with the Construction Manager to resolve any utility or railroad issues that arise during construction.
- The Utility Coordinator shall work with the Construction Manager to work out an understanding of how the utility work schedule will be tracked to assure that work does not slip beyond anticipated dates.

{Letterhead}

*** *IMMEDIATE RESPONSE REQUESTED* ***

{Date}

{Utility Company Address}

RE: MDOT Project, Field Survey, *{Town}*, *{Location}*, *{PIN}*

Dear *{Addressee}*:

Acting on behalf of the Maine Department of Transportation, *{Consultant Firm}* plans to conduct a topographic survey within 60 days for a *{highway/bridge}* improvement project at the following location:

{Project Description}

Enclosed you will find a location map to further assist you in locating the proposed project.

Please complete and return the brief questionnaire attached to this letter. The information provided at this time will allow our project designers to recognize the presence of existing facilities or plans to install additional facilities within the next five years. Your responses will enable us to better coordinate our work with you throughout this project.

In the near future, your company will be contacted by a survey crew to arrange a date when you can locate and mark any existing underground facilities within the project limits. The survey crew will provide a minimum of two weeks notice for this work. By collecting this data during survey, our design personnel will have a better opportunity to reduce or eliminate any potential conflicts with your facilities.

The project identification number (PIN) assigned to this project is *{PIN}* and should be used on any future correspondence regarding this project.

This project ***{has not yet been; is}*** scheduled for advertising ***{Date - if known}***. If you have any questions or concerns, please feel free to contact me at ***{Phone Number}***. Thank you for your cooperation.

Very truly yours,

{Project Manager}

Enclosure: Location Map
Questionnaire

cc: ***{MDOT Utility Team Member}***

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* * IMMEDIATE RESPONSE REQUESTED * *

Please complete the following short questionnaire and FAX a copy of this form to us at ***{FAX Number}*** within five (5) workings days. If you prefer, this form can also be mailed to us at ***{Address}***.

(Circle Answer)

1. Do you presently have or do you plan on installing any facilities in the next 5 years within the above described limits? ***Yes*** ***No***
   (If "No", please skip to question 5 and FAX this form back to us)

2. What type of facilities do you have or intend to install in this area? ***Underground*** ***Aboveground***

3. Contact person for survey marking:
   Name:
   Address:
   Tel. No.:
   FAX No.:
   E-mail address:

4. Contact person for project coordination:
   Name:
   Address:
   Tel No.:
   FAX No.
   E-mail address:

5. **Form completed by:**
   Date:
   Telephone #:
   E-mail address:
   ****
   (USE THIS SPACE FOR ANY ADDITIONAL INFORMATION)

{Letterhead}

{Date}

{Utility Company Address}

RE: Review of Survey Plans, *{Town}*, *{Location}*, *{PIN}*

Dear *{Addressee}*:

Enclosed please find a set of survey plans for the above referenced project being developed by *{Consultant Firm}* on behalf of the Maine Department of Transportation. **Please review the locations of your existing facilities as shown on these plans and complete the brief questionnaire attached to this letter.** Identification of any incorrectly located or omitted facilities at this time will enable us to make the appropriate corrections before substantial design has occurred. I ask that you return the attached questionnaire along with any additional comments you may have within two weeks.

This project is scheduled for advertising *{Date}*, however the preliminary design phase has begun. If you have any questions or concerns, please feel free to contact me at *{Phone Number}*. Thank you for your cooperation.

Very truly yours,

{Project Manager}

Enclosures: Survey Plans
Survey Plan Questionnaire

cc: *{MDOT Utility Team Member}*

{Town}
{PIN}
{Date}
{Utility Name}

Survey Plan Questionnaire

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The Department requests that you complete the following short questionnaire and FAX a copy of this form to us at ***{FAX Number}*** within ten (10) workings days. If you prefer, this form can also be mailed to us at ***{Address}*** c/o ***{Project Manager}***.

(Circle Answer)

1. Are all of your facilities within the project limits shown on the survey plans? *Yes* *No*
2. Are your facilities shown correctly on the survey plans? *Yes* *No*
3. Do your facilities or portions thereof require any unique considerations? *Yes* *No*
4. Are you considering upgrading or replacing any of your facilities? *Yes* *No*
5. Do you feel that an on-site review of the project is required? *Yes* *No*
6. Will you be forwarding any additional information from your files or records? *Yes* *No*

Response by:
Date:
Telephone #:
E-mail address:

****

(USE THIS SPACE FOR ANY CLARIFICATION OR ADDITIONAL INFORMATION)

{Letterhead}

(Date)

{Utility Company Address}

Subject: Review of Preliminary Plans, *{Town}, {Location}, {PIN}*

Dear *{Addressee}*:

Attached you will find preliminary design plans and right-of-way maps for the subject project. At your earliest convenience, **please review these plans to establish the following:**

- What potential conflicts exist between the proposed design and your existing facilities?
- Is additional data gathering (such as test pits) required?
- Aerial Utilities: Please develop a list of preliminary proposed pole locations in compliance with the applicable safety standards and the Department's current *Policy on Above Ground Utility Locations.*
- Underground Utilities: Please develop preliminary proposed underground plant relocation plans for any required relocations or proposed installations in accordance with applicable standards and current MDOT policies.
- If your facilities are located on property which is either owned by your company or for which you have an easement, you may be entitled to reimbursement in accordance with Federal Aid Policy Guide, Title 23, Code of Federal Regulations, Chapter I, Subchapter G, Part 645, Subpart A. Please contact this office prior to preparing any plans or estimates.

The Department intends to advertise this project on ***{Date}***. If you have any further questions, please contact me at ***{Phone Number}***. Thank you for your cooperation.

Very truly yours,

{Project Manager}

Enclosure: Preliminary Plans & Right-of-Way Maps

cc: ***{MDOT Utility Team Member}***

{Letterhead}

{Date}

{Utility Company Address}

RE: Pre-coordination Meeting & Review of Construction Plans, *{Town}*, *{Location}*, *{PIN}*

Dear *{Addressee}*:

Enclosed please find one copy of final construction plans for the above listed project. These plans are only intended for information and planning purposes at this time. No actual relocation of facilities should be made because of these plans.

Please review your proposed pole and/or proposed underground plant locations on the Department's plans. If changes are necessary, they should be communicated to us prior to the Pre-coordination Meeting. **The Pre-coordination Meeting has been scheduled for *{Date, Time and Place of Pre-coordination Meeting}*. It is requested that you be prepared to assign working days to your required utility work at this meeting.**

This project is scheduled for advertising *{Date}*. If you have any questions or concerns, please feel free to contact me at *{Phone Number}*. Thank you for your cooperation.

Very truly yours,

{Project Manager}

Enclosure: Construction & R/W Plans

cc: *{MDOT Utility Team Member}*

{Letterhead}

{Date}

{Utility Company Address}

RE: Draft Special Provisions, *{Town}*, *{Location}*, *{PIN}*

Dear *{Addressee}*:

I intend to include the enclosed Special Provisions in the contract documents for the subject project. It includes scheduling and descriptive information regarding work to be done by your organization.

If the text does not accurately reflect your intentions, please contact this office immediately at *{Phone Number}*. Thank you again for your cooperation.

Very truly yours,

{Project Manager}

Enclosure: Proposed Utility Special Provisions

cc: *{MDOT Utility Team Member}*

{Letterhead}

{Date}

{Utility Company Address}

RE: Pre-construction Meeting, *{Town}*, *{Location}*, *{PIN}*

Dear *{Addressee}*:

A pre-construction utility meeting for the subject project has been arranged for ***{Date, Time and Place of Pre-construction Meeting}***. The purpose of this meeting is to discuss the coordination of work between the contractor and the utilities and any additional considerations or concerns that may exist. Your attendance at this meeting is critical to the success of the project and greatly appreciated.

If you need any additional information, please feel free to contact me at ***{Phone Number}***.

Very truly yours,

{Project Manager}

cc: *{MDOT Utility Team Member}*

{Letterhead}

{Date}

{Utility Company Address}

RE: Pre-construction Meeting Minutes, *{Town}*, *{Location}*, *{PIN}*

Dear *{Addressee}*:

This is my understanding of the issues discussed and the conclusions reached at the pre-construction utility meeting held on ***{Date, Time and Place of Pre-construction Meeting}***. It is understood that the dates and times agreed upon and summarized herein assume reasonable weather conditions and freedom from emergencies.

The following representatives were present:

Name	**Company**	**Telephone #**

{Attendance List}

{Meeting Summary}

I have attempted to summarize our meeting as accurately as possible. If you feel that any of the items discussed herein are misrepresented in any way, please contact me within ten working days. In the absence of any corrections or clarifications, it will be understood that these minutes accurately summarize our discussions. Thank you for your participation and continued efforts in making this a successful project.

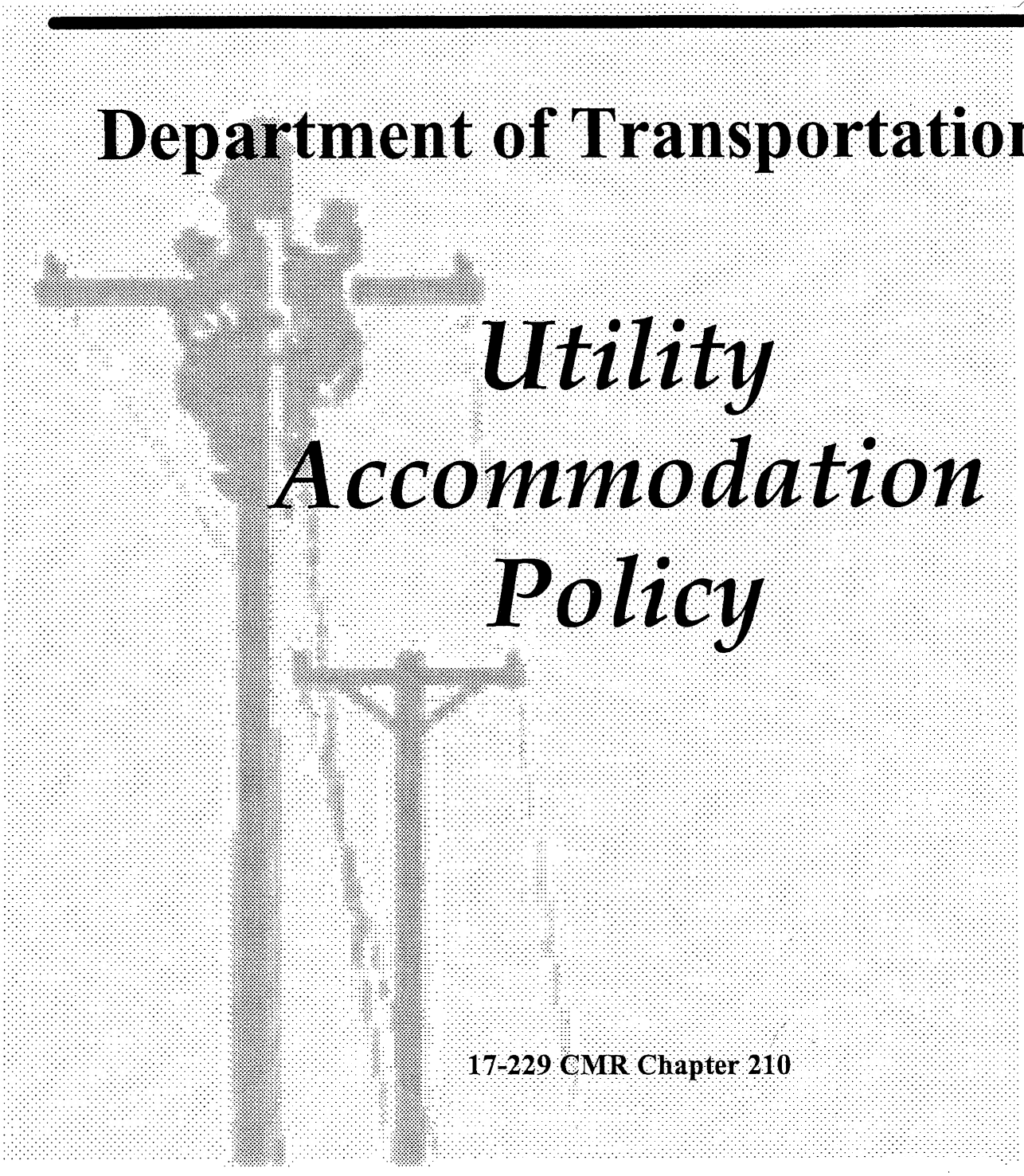
Very truly yours,

{Project Manager}

cc: {MDOT Utility Team Member}

MAINE

Department of Transportation



Utility Accommodation Policy

17-229 CMR Chapter 210

1. PURPOSE AND APPLICATION

This policy is established to regulate the accommodation of Utility Facilities within the limits of state and state-aid Highways. It provides certain administrative procedures and establishes minimum requirements for the location, method of installation, adjustment and maintenance of Facilities so accommodated.

This policy is developed in the interests of safety, protection, utilization and future development of Highways with due consideration given to the public welfare afforded by adequate and economical Utility installations. This policy is authorized by 23 MRSA §52, 35-A MRSA §2503 (16), and is further required by 23 CFR 645.211.

2. SCOPE

As of the effective date of this policy, the location standards defined herein shall apply to all new Facilities and any additions, alterations, adjustments, relocations or replacements of existing Facilities within the limits of state and state-aid Highways. Unless specifically stated otherwise, this policy is not intended to require the adjustment of existing Facilities that do not constitute a safety hazard to the traveling public or do not conflict with the use, construction or maintenance of the Highway. Notwithstanding the foregoing, the duties and responsibilities set forth in Section 6 apply to all Facilities, whether existing or proposed.

The standards defined herein supersede the Department's *Policy on Above Ground Utility Locations, Policy on Tree Maintenance By Utilities Within the Public Right-of-Way*, and the *Utility Location Permits - Preparation of Application for a Utility Location Permit - Basic Requirements.*

Throughout this policy, cross-references to MRSA, CFR and other sources have been shown in brackets [ ]. Although the specific wording in this policy may occasionally match that which is used in the source material, the intent of the cross-reference is to provide a history of major contributing sources and not to imply duplication or interpretation of the source material.

3. ABBREVIATIONS

The following abbreviations used in this policy shall be interpreted as follows:

AADT - Average Annual Daily Traffic

AASHTO - American Association of State Highway and Transportation Officials.

APWA - American Public Works Association

ASTM - American Society For Testing and Materials

COA - Control of Access *Syn: Controlled Access*

CFR - Code of Federal Regulations

CL - Centerline

CMR - Code of Maine Regulations

DEP - Department of Environmental Protection

EP - Edge of Pavement

ES - Edge of Shoulder

ETW - Edge of Traveled Way

FAPG - Federal-Aid Policy Guide - United States Department of Transportation.

FHWA - Federal Highway Administration

FOC - Face of Curb

MDOT - Maine Department of Transportation

MPUC - Maine Public Utilities Commission

MRSA - Maine Revised Statutes Annotated

MUTCD - Manual on Uniform Traffic Control Devices (published by the FHWA under 23 CFR Part 655, Subpart F)

NESC - National Electrical Safety Code (Published by the Institute of Electrical and Electronics Engineers, Inc.)

NHS - National Highway System

PBR - Permit-By-Rule

R/W - Right-of-Way

TCP - Traffic Control Plan

TW - Traveled Way

USC - United States Code

USDOT - United States Department of Transportation

4. DEFINITIONS

The following terms used in this policy shall be interpreted as follows:

Appurtenance - Any manhole, pull box, junction box, Vent, riser, anchor, guy wire, push brace or other incidental component of a Utility system, whether aboveground or belowground, excluding Facilities.

APWA Uniform Color Code - *Red* = Electric; *Yellow* = Gas-Oil-Steam; *Orange* = Communication-CATV; *Blue* = Potable Water; *Purple* = Reclaimed Water; *Green* = Sewer; *Pink* = Temporary Survey Markings; *White* = Proposed Excavation

Backfill - Replacement of soil around and over a Facility.

Backslope - The graded slope between the centerline of ditch and the original ground, located on the side of the ditch opposite the Traveled Way. *Ref. Appendix*

Bridge - A structure designed to carry pedestrians, vehicles, trains or other modes of transportation over another transportation corridor, water, or other physical barrier and having a single span of at least 10 feet between supports or a combined open area of 80 square feet for multiple structures (i.e. multiple culverts). For the purpose of this policy, this term shall include both bridges and minor spans as defined in 23 MRSA §562.

Casing - Pipe or other separate structure around and outside an underground Facility that is designed to support the dead loads of the Highway and superimposed loads thereon, including that of construction machinery.

Clear Zone - A Recovery Area established through consideration of traffic volumes, speed, recoverable and non-recoverable slopes, and roadside geometry and as applied through procedures defined in the *Roadside Design Guide* published by AASHTO.

Commissioner - The Commissioner of the MDOT.

Communication Lines - The conductors and their supporting or containing structures that are used for public or private signal or communications service, and which operate at potentials not exceeding 400 V to ground or 750 V between any two points of the circuit, and the transmitted power of which does not exceed 150 W. When operating at less than a nominal voltage of 90 V, no limit is placed on the transmitted power of the system. Under specified conditions, communication cables may include communication circuits exceeding the preceding limitation where such circuits are also used to supply power solely to communications equipment. *Note: Telephone, telegraph, Railroad signal, data, clock, fire and police alarm, cable television and other systems conforming with the above are included. Lines used for signaling purposes, but not included under the above definition, are considered as*

(electric) supply lines of the same voltage and are to be so installed. [NESC]

Compact Area - An area in which a Municipality has the responsibility for maintenance of state and state-aid roads. Factors that define a compact area are specified in 23 MRSA §754. A current list of Municipalities having Compact Areas is available through the Utilities Web Site.

Conduit - A structure containing one or more Ducts. [NESC]

Construction Manager - The authorized field representative assigned to oversee and manage a particular MDOT Project. This individual may also be referred to as the Resident Engineer or Resident Inspector.

Construction Season – The portion of any calendar year in which most Utility or Highway construction occurs (typically April through November).

Controlled Access - A type of Right-of-Way where all rights of access have been acquired from the abutting property owners. The Department has the full power and authority to lay out, establish, acquire, open, construct, improve, maintain, discontinue and regulate the use of all Highways so designated. [23 MRSA Chapter 7]

Coordination Meeting - A meeting that is held to discuss project specifics and concerns with the representatives of Utilities having known proposed or existing Facilities in the General Area of a Proposed Installation.

Cover - Depth of material between the top of a Facility and finished grade of the Highway.

Curb - A raised strip of bituminous, concrete or granite that is located at the Edge of Shoulder for surface drainage.

Day(s) - Calendar days. Each day shown on the calendar including Saturdays, Sundays and holidays.

Department - The State of Maine Department of Transportation.

Direct Burial - Installing a Facility underground without Conduit, duct, Sleeve or any type of Encasement.

Division Engineer - The engineer in charge of any of the seven MDOT Maintenance Divisions. MDOT Division Offices are currently located in Presque Isle, Ellsworth, Bangor, Fairfield, Rockland, Scarborough and Dixfield.

Duct - A single enclosed raceway for conductors or cable. [NESC]

Edge of Pavement - (EP) - The outside edge of the paved portion of the Highway constructed and surfaced for normal travel, including any surfaced Shoulders but excluding sidewalks. *Ref. Appendix*

Edge of Shoulder - (ES) - The outside edge of the Shoulder not adjacent to the Traveled Way. This term may be used whenever a Shoulder exists, regardless of whether or not the Shoulder is surfaced with hot bituminous pavement. *Ref. Appendix*

Edge of Traveled Way - (ETW) - The outer edge of the outmost lane intended for vehicular traffic and exclusive of shoulders, turning lanes or climbing lanes. The ETW is often indicated by a solid white edge line that exists between the Traveled Way and the Shoulder. In the absence of a painted edge line, the Traveled Way width shall be assumed as 12 feet for all NHS highways or as defined in the tables provided in Section 10(2)(C)(2) for all non-NHS highways, unless otherwise directed by the MDOT Utilities or Division Engineer. *Ref. Appendix*

Electric Supply Lines - Those conductors used to transmit electric energy and their necessary supporting or containing structures. Signal lines of more than 400 V are always supply lines within the meaning of the rules, and those of less than 400 V may be considered supply lines, if so run and operated throughout. *Syn: supply lines* [NESC]

Encasement - Structural element surrounding a Facility (Ref. "Casing").

Facility - "Facilities" means: A) If under the surface of the Public Way, pipes, cables and Conduits; and B) If on or over the surface of the Public Way, poles, guys, hydrants, cables, wires and any plant or equipment located on or over the surface of the Public Way. [35 MRSA §2502] For the purposes of this policy, "Facility" shall include all components of a Utility system not covered by the definition of Appurtenance.

Flow Area - The strip of land that includes the full width of a ditch line, plus the bottom 600 mm (2') of both the Inslope and Backslope. For example, a flat bottom ditch with a width of 600 mm (2') results in a Flow Area width of 1.8 m (6'). Since a standard "V" ditch has no width, the Flow Area has a total width of 1.2 m (4'). *Ref. Appendix*

Freeway - The highest type of arterial Highway with full Controlled Access. Essential Freeway elements include: Medians, grade separations at cross streets, ramp connections for entrance to and exit from the Traveled Way, and, in some cases, frontage roads [AASHTO, A policy on Geometric Design of Highways and Streets]. Examples of Freeways in Maine include the Interstate system and the portion of Route 1 between Brunswick and Bath.

General Location - The location along a Highway to be occupied or crossed by a Proposed Installation. Descriptions of a General Location must include a distance from the center of an appropriate Reference Point to the beginning or end of the Proposed Installation, reference to the county and Municipality in

which the Proposed Installation will be installed and the relevant Highway name(s) and route number(s) (as applicable). [17-229 CMR Chapter 205]

Hazardous Transmittant - A substance or material which has been determined by the Federal Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated. [49 CFR 121.8].

Highway - A Public Way including all of the Right-of-Way that may have been laid out by the State, county or town. [23 MRSA §2 (2)] *Ref. Appendix*; *Syn: street, road*

Highway Opening Permit - A permit that authorizes making any underground installation as provided in chapter 23 (Title 35-A MRSA) and Title 23, sections 54 and 3351 to 3359. [35-A MRSA §2503 (14)]

Highway Structure - A general term referring to any part of the Highway that has been designed and constructed with structural considerations to serve a specific highway purpose. Included under this term are Bridges, retaining walls, major drainage structures (not including standard catch basins or culverts), and other similar structures.

Inslope - The graded slope between the Edge of Shoulder and the centerline of an adjacent ditch or the bottom of the slope. *Ref. Appendix*

Interstate - A Highway on the National System of Interstate and Defense Highways having Freeway characteristics.

Letter of No Objection - A letter from the Department that acknowledges a private Facility within the Highway limits and states that the Department currently has no objection to the Facility being so located. There are no continuous rights conveyed with this letter and the Department may require modification, relocation or complete removal of the private Facility at any time. The private Facility owner bears all costs and risks relating to the Facility and is liable for any damage the Facility may cause.

Licensing Authority - "Licensing Authority" means: A) The Department of Transportation, when the Public Way is a state, or state-aid Highway, except for state or state-aid Highways in the compact areas of urban compact municipalities as defined in Title 23, section 754; B) The municipal officers or their designees, when the Public Way is a city street or town way or a state or state-aid Highway in the compact areas of urban compact municipalities and as defined in Title 23, section 754; and C) The county commissioners, for all other Public Ways. [35-A MRSA §2502 (1)]

Location Permit - A permit that authorizes the location of a Utility Facility within the Right-of-Way limits in accordance with 35-A MRSA Chapter 25.

Median - The portion of a divided Highway separating the traveled ways for traffic in opposite directions.

MDOT Project - Any capital improvement of a transportation facility administered by or funded through the Maine Department of Transportation. This does not include maintenance activities.

Multiple Pole Lines - Two or more sets of Utility poles located along a Highway for the conveyance of transmission or distribution wires or cables, not including service lines.

Municipality - A city or town. [30-A MRSA §2001 (8)]

National Highway System - Interconnected urban and rural principal arterials and highways (including toll facilities) which serve major population centers, international border crossings, ports, airports, public transportation facilities, other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel. All routes on the Interstate System are a part of the National Highway System [23 CFR 470]. The NHS Highways in the State of Maine are identified on the Utilities Web Site.

National Standards - Any standards that have been developed and adopted to apply throughout the United States to specifically address Facilities of a defined type. Specific examples include the USDOT Pipeline Safety Regulations and the NESC.

Out-of-Service Facility - A Facility that is disconnected from the system and not intended to be used in the future by the operating Utility. Such Facilities may also be considered "abandoned" by the MPUC.

Pavement Overlay - A MDOT Project with a scope consisting of placing new pavement over an existing highway surface without realignment of any part of the centerline or additional widening. Project scopes included under this definition are all "Level 1 Resurfacing" projects and, depending upon the specific project, some "Level 2 Resurfacing" projects.

Pavement Structure - The portion of the Highway specifically designed or designated to support vehicular travel including the full width of Traveled Way, the full width of adjacent Shoulders, and the area beyond the Edge of Shoulder to the limits of Subgrade. *Ref. Appendix*

Preliminary Engineering - The locating, making of surveys, soil and foundation investigations, and the preparation of plans, specifications and estimates in advance of construction operations.

Proposed Installation - Facilities proposed to be constructed within a Highway, including future replacements, additions and associated services planned within

the next five years and to the extent that they are known by the applicant at the time of application. [17-229 CMR Chapter 205]

Public Way - Any road capable of carrying motor vehicles, including, but not limited to, any state Highway, municipal road, county road, unincorporated territory road or other road dedicated to the public. [23 MRSA §1903 (11)]

Railroad - "Railroad" includes every commercial, interurban and other railway and each and every branch and extension thereof by whatsoever power operated, together with all tracks, bridges, trestles, rights-of-way, subways, tunnels, stations, depots, union depots, ferries, yards, grounds, terminals, terminal facilities, structures and equipment and all other real estate, fixtures and personal property of every kind used in connection therewith, owned, controlled, operated or managed for public use in the transportation of persons or property. [23 MRSA §5001 (1)]

Railroad Company - Every corporation or person, their lessees, trustees, receivers or trustees appointed by any court owning, controlling, operating or managing any railroad for compensation within this State. [23 MRSA §5001 (2)]

Recovery Area - The unobstructed portion of the Highway beyond the Edge of Traveled Way that is preserved to provide drivers of errant vehicles a reasonable opportunity to stop safely or otherwise regain control.

Reference Point - A point on the face of the earth that is easily identified on most street maps and on the ground or a point defined from the Department's inventory road, Bridge or node numbers. Acceptable examples of the first type include town lines, major intersections, major stream crossings, Railroad crossings, or Bridges.

Right-of-Way - Real property or interests therein, acquired, dedicated or reserved for the construction, operation and maintenance of a transportation facility and other related facilities.

Scenic Byway - A Highway having special scenic, historic, recreational, cultural, archeological, and/or natural qualities that have been recognized as such through legislation or some other official declaration. The terms State Scenic Byway, National Scenic Byway, or All-American Road are designations included under this general term. [FHWA Docket No. 95-15 & 23 M.R.S.A. §4206 (G)]

Service - A Facility that connects a customer to a Utility distribution system or network.

Shoulder - That portion of the Highway contiguous with the traveled way for lateral support of base and surface courses and support of a vehicle. *Ref. Appendix*

Sleeve - A larger pipe enclosing a Facility. Also see "Casing".

Special Materials - A general term referring to any materials that have been designed with structural considerations to treat special or unique conditions of the Highway. Included under this term are geotextiles, geofoams, lightweight fills, tire chips and other similar materials. This term is not intended to apply to any structures covered under the terms "Highway Structure" or "Pavement Structure".

Specific Location Plan - A plan that indicates the location of Facilities along a Highway. The plan may or may not be drawn to scale, but must be adequately dimensioned to accurately identify the location of a Proposed Installation. Longitudinal distances are provided between control points, bends, manholes, poles, and other similar features. Horizontal offset distances are provided from the centerline of the Traveled Way, nearest Edge of Traveled Way, nearest Edge of Shoulder, face of Curb, or other well defined, applicable reference. Offsets indicated are to the centerline of underground installations or to the Traveled Way side of aboveground installations. The Edge of Traveled Way, Right-of-Way lines (assumed or otherwise), and other pertinent Highway features shall also be indicated on this plan.

Subgrade - The graded portion of a Highway upon which the Pavement Structure is constructed to support vehicular travel. Subgrade exists as a plane located parallel to and a specified depth below the surface of the Traveled Way. This plane extends horizontally, at the same cross-slope as the Traveled Way, to the intersection with the Inslope or the centerline of ditch, whichever is closer to the Traveled Way centerline. Where no ditch is present, the horizontal limit of Subgrade is one foot beyond the Edge of Shoulder or face of Curb. The depth to Subgrade from the centerline of the Traveled Way surface is based upon the design of the Pavement Structure. On Highways that lack a defined Subgrade or have a Subgrade of less than 600 mm (24 inches) below the Traveled Way surface, a minimum depth of 600 mm (24 inches) shall be used. *Ref. Appendix*

Traffic Control Plan (TCP) - A plan, prepared in accordance with the MUTCD, which indicates the type and placement of traffic control devices to be used around and within work areas on Public Ways. These plans are designed and stamped by a Professional Engineer registered in the State of Maine or an American Traffic Safety Services Association (ATSSA) Certified Worksite Traffic Supervisor. The plan represents actual site conditions and clearly indicates the type, location and number of signs, the use of message or arrow boards, the use of police officers or flaggers, and any other information relating to maintaining the safe and efficient flow of traffic.

Traveled Way (TW) - That portion of a Highway designated for the use of vehicular traffic excluding any Shoulders, sidewalks or parking spaces. *Ref. Appendix*

Trenchless Installation Methods - Any process through which a pipe, casing or other Facility is installed underground without using an open cut. This includes: tunneling, pipe jacking, microtunneling, pipe bursting, directional drilling, auger boring, guided boring, and pipe ramming

Utilities Engineer - The MDOT representative in charge of the Utility & Railroad Services section of the MDOT. This individual is also known as the Utility & Railroad Services Manager. *Mailing Address: Maine Department of Transportation, Utility & Railroad Services, State House Station 16, Augusta, ME 04333*

Utilities Web Site - The web site maintained by the Department for the purpose of providing current data to Utilities. The address for the Utilities Web Site is: *http://www.state.me.us/mdot/utility*

Utility - Every public or private entity operating telephones or transmitting television signals; every public or private entity that owns, controls, operates or manages any pipeline within or through this State for the transportation as a common carrier for hire of oil, gas, gasoline, petroleum or any other liquids or gases; every public or private entity making, generating, selling, distributing and supplying gas or electricity; every water or sewer company, district or system owned or operated by a public or private entity; every municipally owned or operated fire alarm, police alarm or street lighting circuit or system; every cooperative organized under chapter 35 (Title 35-A MRSA); and any other public or private entity engaged in telecommunications or the transmission of heat, or electricity. [35-A MRSA §2501] For the purposes of this policy, this definition incorporates entities beyond those defined as a "Public Utility" in Title 35-A MRSA and is not intended to affect the applicability of that definition for purposes beyond the scope of this policy.

Utility Coordinator - The person responsible for coordinating Utility relocations in conjunction with MDOT Projects.

Vent - An Appurtenance to discharge gaseous emissions from a Casing.

5. LOCATION PERMITS

1. Location Permits Required/Not Required

A Utility may not construct new Facilities within the limits of a Highway without applying for and obtaining a Location Permit from the applicable Licensing Authority except as specified herein. [35-A MRSA § 2501, 23 CFR 645 Subpart B]

A. Location Permit Required:

A Location Permit is required in each of the following circumstances.

(1) All new Facilities except as specifically exempted in Section 5(1)(B).

(2) Replacement of more than 5 poles or 50 meters (164 feet) of underground Facilities, regardless of whether those Facilities were previously permitted or deemed legal structures in accordance with 35-A MRSA §2309. For the purposes of this section, Facilities that exceed these limits are hereby considered new Facilities and not "replacements" or "additions" under 35-A MRSA §2503 (9).

(3) Installation of cabinets, transformers or other similar system components that are mounted on pads or multiple poles, not to include standard pedestals or those that are supported on an existing, single pole. Replacement of such Facilities requires permitting only if the existing supporting pad or poles are to be replaced.

(4) Replacement of any aboveground Facility resulting from damage caused by a vehicle two or more times within the past 12 months.

B. Location Permit Not Required:

A Location Permit is not required in the following circumstances, providing the Facility or Appurtenance being installed meets the standards defined herein unless otherwise specified. Where an exception is required, an application shall be submitted in accordance with Section 5(2).

(1) Attaching additional wires, cables or Appurtenances to existing poles, providing the Utility making such attachment has permitted or legally located Facilities under 35-A MRSA §2309 upon all of the same poles.

(2) Services, as defined in 35-A MRSA §2503 (10)

(3) Replacement of up to 5 poles or 50 meters (164 feet) of underground Facilities within the location tolerance as specified in Section 5(4) with respect to the original location of the Facilities being replaced. Poles replaced under this section are not required to meet the

corridor offsets as specified in Section 10(2)(C). Utilities shall not replace Facilities in greater amounts than authorized herein by dividing projects having one primary engineering purpose into multiple, smaller projects.

(4) New wires or cables in existing conduit that is either permitted or legally located under 35-A MRSA §2309.

(5) Emergency Replacements: Replacement of Facilities that present an immediate hazard or are needed to restore utility service, providing after-the-fact permitting occurs within 60 days when required.

C. Highway Opening Permits:

Applicants are advised that, depending upon the type of installation proposed, a separate Highway Opening Permit might also be required from the applicable Licensing Authority.

2. Application Process [35-A MRSA Chapter 25]

This section outlines the application procedures for Utility Location Permits on all Highways for which the Maine Department of Transportation is the Licensing Authority. There are two processes available to obtain a Location Permit: Statutory Application Process and the Permit-By-Rule process. The Department reserves the right to require additional information on any applications as necessary.

A. Statutory Application Process [35-A MRSA §2503]

The Statutory Application Process may be used by all Utilities to apply for a Location Permit.

(1) Submission Requirements

In order to obtain a Location Permit through the statutory application process, a Utility or authorized agent must first submit a completed application to the Department that includes each of the components listed below. A single application may include multiple Facilities of the same type, provided the general and specific location of each Facility is clearly noted on the application.

(a) **Completed Application Form(s)**: A blank application form is available on the Utilities Web Site. Applications shall provide the following information:

(i) *Description of the General Location*: The description of the General Location shall be as defined in Section 4, Definitions. Alternatively, if the Proposed Installation involves only attachment to existing poles and a permit is required, the description may simply

reference the MDOT Location Permit number issued to the owner of the poles.

(ii) *Description of the Proposed Installation:* The description of the Proposed Installation shall be as defined and shall include, as appropriate, the type of installation, the size of pipes, the number and kind of poles, voltage and number of phases, and the number of cables, anchors and guys. [17-229 CMR Chapter 205] This section is not intended to limit future additions as authorized by Section 5(1)(B)(1).

(iii) *Minimum depth below / height above ground:* Indicate the minimum Cover for underground Facilities or the minimum height above the Highway surface for aerial wires and cables.

(iv) *Maximum operating pressures:* The maximum operating pressure must be stated for pressurized pipelines

(v) *Statement of intent to publish* [35-A MRSA § 2503 (2,3,4)]*:* If a Proposed Installation involves the construction of Electric Supply Lines carrying over 50,000 volts or the installation of a cabinet, transformer(s) or other similar structure(s) mounted upon a pad or multiple poles, public notice is required. Otherwise, public notice of a Proposed Installation is at the applicant's option. If published, the applicant shall include the text of the application at least one time in a newspaper circulated within the Municipality (or Municipalities) encompassing the limits of the Proposed Installation. The publication shall include a statement informing any person owning property that abuts the applicable Public Way of their right to file a written objection with the Licensing Authority within 14 days after publication. Evidence of publication shall be submitted to the Department of Transportation before a permit can be issued. If not published, the application will be processed and objections may be filed in accordance with 35A MRSA §2503 (3). Objections received in this manner could result in the applicant being required to relocate the Facility at its expense.

(vi) *Owner's signature:* The owner or operator of the Proposed Installation must sign the application. Any person signing on behalf of the owner or operator must provide evidence of authorization to sign.

(vii) *Construction by Others*: If a Proposed Installation is to be constructed by a person or entity other than a Utility, that person or entity shall include a signed letter with the application acknowledging complete responsibility for the Proposed Installation until such time that the Facility is conveyed to the Utility. In no case shall a Proposed Installation constructed by others be connected to a Utility system or network prior to such conveyance unless otherwise permitted.

Applications submitted in this manner shall be signed by the Utility to indicate their agreement with the location of the proposed Facility and their intent to accept the Facility upon completion of construction. If a Location Permit is issued, it will include a special condition acknowledging construction by a non-Utility.

(b) **Specific Location Plan(s):** The Specific Location Plan shall be as defined in Section 4, Definitions. A separate Specific Location Plan shall be submitted for each proposed Facility. Specific Location Plans shall be submitted on standard letter or legal size sheets (for microfilm archive purposes) with no more than two (2) Highways being shown on one sheet.

If the Proposed Installation only involves attachment to existing poles and a permit is required, the plan may simply locate the starting and ending points in relation to any of the major features indicated in the General Location. Offsets to existing poles are not necessary.

(c) **General Location Map:** For each Proposed Installation, the Utility must submit an accurate area map (examples - MDOT Highway plan or U.S.G.S. quadrangle) or a sketch traced from such a map identifying the General Location of the Proposed Installations.

(d) **Supporting Data:** All applications must also contain statements that clearly indicate the following:

(i) Whether or not joint use or ownership of the Facility is reasonably anticipated within a year of the date of initial installation.

If the Proposed Installation involves attachment to the poles of another Utility, a copy of the lease or agreement showing evidence of the right to occupy the poles shall be included with the application. Alternatively, the application may also be signed by the Utility that owns the poles.

(ii) Whether or not there are any existing Facilities of others which are located within the minimum clearance offset specified in Section 8(1)(I);

(iii) That a copy of the application has been submitted to the municipal clerk of each Municipality or the clerk of the County Commissioners in the case of unorganized townships; and

(iv) The name, address and telephone number of a person that will be available to answer questions regarding the application or to review the Proposed Installation on-site.

(e) **Special Materials & Highway Structures:** If any part of the Proposed Installation is to be made on or within 8 meters (25 feet) of a Highway Structure or area involving Special Materials (as measured horizontally), the application must be accompanied by plans showing the location, method of construction, clearances and other data pertinent to how the Proposed Installation may impact those areas. For detailed requirements regarding Bridges and other Highway Structures, please refer to Section 12.

(f) **Traffic Control Plan:** Any work proposed within the limits of a Freeway shall include a Traffic Control Plan as defined in Section 4, Definitions. Specific requirements are further described within Section 6(6)(B), Maintenance of Traffic, Freeways.

(2) Processing

Three (3) complete copies shall be submitted to the MDOT at the address provided on the application form. One complete copy shall also be submitted to the municipal clerk of the applicable Municipality or the clerk of the county commissioners in the case of unorganized

townships. The application will be reviewed with primary consideration of the standards defined within this rule, however, specific site conditions, proposed work in the same General Location, public comments, or other concerns of the Department may also affect permit conditions. Permits will normally be processed within 30 Days, however, up to 60 Days is permissible. [35-A MRSA § 2503 (19)]

(3) Completion Confirmation

The Department will send the Utility a Completion Confirmation Form along with an approved Location Permit. Upon completion of installation of a permitted Facility, the Utility shall return the completed form to the Department, stating that all work has been completed in accordance with the specified permit. If field modifications were necessary or the scope of the original project was reduced, amended sketch plans from the original permit shall be submitted to indicate the changes. If field changes beyond the tolerance specified in Section 5(4) were necessary, the name of the MDOT representative and the date of all applicable approvals shall be indicated on the form. All amendments submitted as described above shall be deemed accepted by the Department unless the Department notifies the Utility otherwise within 60 days of receipt.

B. Facility Locations Authorized Through MDOT Projects

Locations of Facilities authorized through MDOT Projects are permitted through the coordination process that occurs in the Preliminary Engineering phase of an MDOT Project. Through this process, the Utility Coordinator and a representative from the Utility work together to generally determine the best location for the proposed or relocated Facilities. The Utility then designs their Facilities in accordance with the accommodation standards defined within this manual or as otherwise authorized by the Department. Once all available information regarding the new location of the Facilities is submitted to and accepted by the Department, a Location Permit is considered issued. This paragraph shall only apply to utilities that must be relocated as a result of the MDOT Project. New Facilities (not replacement Facilities) must be permitted as otherwise described herein. [35-A MRSA § 2503 (8)]

C. Permit-By-Rule (PBR) [17-229 CMR Chapter 205]

The Permit-By-Rule for aboveground Facilities was originally adopted in July 1995 to streamline the procedure for permitting aboveground Facilities. PBR is an alternative to the Statutory Application Process. It allows an application, which is submitted in accordance with the requirements of Chapter 205 of the Department's rules, to automatically become a valid permit within 14 or 30 Days, providing the Department raises no objections. As described in

Chapter 205, this process is only available to Utilities proposing to install poles, guys, cables, wires and related aboveground equipment in areas that are not within the Right-of-Way of Controlled Access Highways, Scenic Byways or within the limits of an MDOT Project. Facilities properly installed pursuant to these rules are legal and permitted structures. [35-A MRSA §2503(16)]

D. Additional Process For Significant Utility Installations

In addition to the applicable application process described in 5(2)(A) and 5(2)(C), Proposed Installations involving underground Facilities of at least 150 meters (492 feet) in length (excluding new or replacement wires or cables within existing Encasement) or the installation of 25 or more utility poles require evidence of coordination with at least one representative for every Utility having existing or Proposed Installations within the General Location. Coordination may occur individually with each Utility or through Coordination Meeting(s). Coordination Meetings shall be setup by the entity proposing a new project at least one week in advance of the actual meeting date. A reasonable effort shall be made to assure the availability of as many attendees as possible. Additional evidence submitted with the Location Permit application shall include:

(1) Identification of all known Utilities having existing or Proposed Installations in the General Location,

(2) The name and telephone number each individual associated with each of the Utilities identified in subparagraph (1),

(3) Identification of any major concerns identified by the other Utilities and how each concern will be addressed.

3. Lapse of Permit

Permits granted pursuant to these rules shall expire if substantial construction of the Proposed Installation is not commenced within 12 months of the permit date or if construction work is suspended for one or more entire Construction Seasons.

4. Installation in Conformance With a Location Permit

As determined by the Department through its application review process, specific permits may include requirements beyond the minimum standards stated within this policy to the extent necessary to protect the traveling public, minimize conflicts or ensure the efficient use of the Highway corridor. Proposed Installations or replacements shall be installed as permitted. If changes beyond the tolerance of the permit become necessary, the Utility shall notify the Division Engineer or authorized representative and request permission to amend the permit.

Unless otherwise specified in the permit, field changes are considered to be within the tolerance of the permit providing they comply with all of the following:

A. The offset of the modified location of aboveground Facilities is within 3 m (10 feet) of the permitted location and no closer to the Highway, or, the offset of the modified location of underground Facilities is within 900 mm (3 feet) of the permitted location;

B. The modified location does not conflict with any existing Facilities, Highway features (i.e. sidewalks, drainage pipes, Curb, entrances, etc), or other Proposed Installations within the Highway; and

C. The modified location otherwise complies with all standards defined in this policy.

5. Unauthorized Facilities

Any Facility installed within the Highway limits and not in compliance with the terms of its Location Permit, 35-A MRSA Chapter 23, 35-A MRSA Chapter 25, or this policy, is considered an Unauthorized Facility. As such, there is no legal right for that Facility to be located or maintained within the Highway limits unless the location is otherwise authorized by deed or easement. Upon notice from the Department, the Utility is fully responsible for correcting any Unauthorized Facility as directed by the Department, which may include after-the-fact permitting or removal of the Facility.

6. Private Facilities

Since private Facilities located within the Highway limits reduce the available Right-of-Way for public use, there are greater restrictions placed thereupon. Upon receipt of a complete application and with consideration of the standards provided herein, the Department may issue a Letter of No Objection to permit a private Facility to exist within the limits of the Highway. Said permit shall only be valid until such time the Department determines that the Facility interferes with the Highway, its maintenance or any of its uses. The Facility owner shall bear all costs relating to the Facility including installation, relocation, adjustment and removal. Owning a private Facility within the Highway limits does not guarantee continued use.

A. Application

Applications for Letters of No Objection may be obtained from the Utilities Web Site and shall include any applicable information as specified in Section 5(2)(A)(1). First-time applicants are encouraged to contact the Department to review the application requirements. In instances where a Private Facility is proposed in a Highway in front of property not owned by the applicant, a letter from that abutting property owner stating no objection to the proposed installation shall accompany the application. (Note: A Facility is deemed "in front of" a parcel of property whenever it is located between the centerline of the Traveled Way and the R/W line adjacent to the parcel in concern).

B. Crossings

Private Facilities, not directly connected to a Utility distribution system or network, will normally be authorized to cross Highways, providing all applicable standards are met as well as any special requirements specified by the Department.

C. Longitudinal Installations

Private installations parallel to and within the limits of the Highway will not normally be authorized. However, where a proposed installation is less than 150 m (492 feet) in length, the Department will consider each application on a case-by-case basis.

6. FACILITY MAINTENANCE OBLIGATIONS

This section outlines the requirements for all Utilities having Facilities that are either permitted or deemed legal structures within the limits of state or state-aid Highways. These requirements are applicable to all new and existing Facilities.

1. Maintenance of Facilities

Every person or Utility having Facilities within the Highway limits is responsible for keeping those Facilities sufficiently maintained so as not to degrade the integrity of the Highway or reduce the overall level of safety. Any deficiencies in a Facility that create a potential hazard to the Highway users or maintenance crews shall be promptly corrected upon notice from the Department.

2. Records and Locating Facilities

Every person or Utility having Facilities within the Highway limits is responsible for maintaining records regarding the following:

A. The Highway and Municipality in which each Facility is located,

B. Evidence of all applicable permits, easements, deeds, or other applicable rights for any Facilities within the limits of the Highway,

C. The specific installed location of underground Facilities within the limits of the Highway.

Persons or Utilities not having the records specified above shall be responsible for obtaining that information for the Department to the extent requested by the Department and reasonably necessary for Department activities.

3. Services

Each Utility is responsible for assuring proper adjustment, relocation or repair of any portion of a Service that is located within the limits of the Highway and connected to that Utility's distribution system or network.

4. Out-of-Service Facilities

All Facilities taken out of service and located either aboveground or attached to Highway Structures shall be removed within 60 days of their last use. Underground Facilities that are taken out of service may remain in their existing locations providing the owner or operator retains full responsibility for the Facility as provided herein. Should a remaining Out-of-Service Facility degrade the Highway or interfere with its use, construction or maintenance, the owner of that Facility is responsible for either correcting the conflict or removal of the Facility at the Department's option.

5. Utility Pole Replacement and Wire Transfers:

Unless otherwise approved by the Department, all wire transfers and removal of replaced poles shall not extend beyond one year from the installation date of the new

pole(s). Poles that remain beyond this one-year, maximum tolerance, or otherwise approved completion date, are not considered maintained in accordance with the terms of their permit as specified in 35-A MRSA §2503(6). All replaced poles are deemed Out of Service upon transfer or removal of all wires and/or cables and shall be removed from the Highway limits in accordance with Section 6(4).

6. Maintenance of Traffic

A. State and State-aid Highways

Any work performed by any party within the limits of a state or state-aid Highway, whether new construction, adjustment, or maintenance operations, shall be conducted in a manner to protect the public. Traffic control methods consistent with the current version of the MUTCD shall be consistently implemented to ensure the safe and expeditious movement of the traveling public. [23 CFR 645.209]

B. Freeways

On Freeways, additional requirements beyond those provided within the MUTCD may be required. The Department must approve all work occurring within the Right-of-Way limits of a Freeway in advance. A Traffic Control Plan shall be submitted as part of the application. Additional requirements are specified as follows:

(1) General

(a) Median crossovers shall not be used at any time.

(b) Personal vehicles owned by any of the work area employees shall not access the work area from the Interstate or be parked within the Right-of-Way.

(c) Traffic shall not be interrupted during inclement weather, weekends or periods of heavy traffic

(d) All sign arrays, cones, and flashing arrow boards shall be in place and operating before the start of any other work.

(e) The Utility shall have a competent individual on site for the entire duration of the work that is familiar with MUTCD standards and is capable of diagnosing and correcting any traffic problems that may arise as a result of the work.

(f) 48 hours advance notice shall be given to both the Division Engineer and the Maine State Police prior to the start of any work.

(2) Short-Term Wire Crossings

If a Utility must pull an aerial wire across a Freeway and there is no alternative to briefly interrupting the through traffic, a "Rolling Roadblock" procedure may be utilized in accordance with the following requirements:

(a) Immediately prior to the start of work, all advance signing shall be positioned in accordance with the Traffic Control Plan.

(b) Only the State Police shall stop Interstate traffic. One police cruiser, for each direction, may be used to stop traffic when only two lanes (in each direction) are present. However, each additional lane will require one additional police cruiser.

(c) Traffic shall only be stopped between the hours of 10:00 p.m. and 5:00 am

(d) Traffic shall not be stopped for more than 10 minutes in any 1-hour period.

(3) Underground Crossings by Trenchless Installation Methods

The following shall apply whenever Trenchless Installation Methods are used to cross a Freeway:

(a) No access to the work site will be permitted from the Controlled Access Highway.

(b) Pits will normally be located outside the Right-of-Way limits. If conditions warrant, the Department may elect to allow pits within the Right-of-Way limits, providing no part of the operation encroaches within the Clear Zone limits.

If all work is to occur outside of the Right-of Way limits, work zone signing on the Interstate will not be necessary. If the work is to occur within the Right-of-Way, but outside of the Clear Zone limits, "Work Area Ahead" signs shall be used.

C. Railroad Crossings

Any work performed within the area defined by the crossing of the Highway and the Railroad limits shall also comply with all reasonable requirements of the Railroad Company to ensure the safety of the workers, the traveling public and the safe operations of the trains.

D. Noncompliance

Should any person fail to comply with the requirements set forth above, the Department may suspend the work until the noted deficiency is corrected. When the work being performed is within the Highway limits and not located

within the construction limits of an MDOT Project, the Utilities Engineer, Division Engineer or authorized representative shall determine when a suspension is warranted. If the work being done is within the construction limits of a MDOT Project, the Construction Manager or authorized representative shall determine when a suspension is warranted.

7. Tree Clearing/Trimming

A. General

Utilities are responsible for all work associated with any tree clearing and/or trimming required to install and maintain their Facilities.

B. Notification

Utilities must notify the Department, in writing, at least thirty Days prior to any trimming, cutting, or removal of trees by the Utility within the Highway limits. Such notification shall include:

(1) the names of the Municipalities where the operations are to be performed,

(2) a description of the maintenance operations,

(3) the name and work number of the person(s) responsible for the maintenance operations, and

(4) whether any of the areas listed are on a Scenic Byway.

All notifications shall be sent to the Division where the tree maintenance operation is to be performed. The addresses and corresponding areas for each Division are provided on the Utilities Web Site. If the tree maintenance operations are to be performed on a designated Scenic Byway, then a copy of the notification must be sent to the Utilities Engineer.

C. Notification Exceptions

When thirty Days notice cannot be provided for "hot spot" work or new construction line clearance work that was not anticipated, the Divisions may be contacted by phone and the thirty Days notice will be waived. This does not apply to work on Scenic Byways or typical tree maintenance operations on other Highways. Emergency trimming and removal of trees to restore power or communications do not require notification

D. Herbicide

With the exception of coniferous (softwood) trees, any stumps over 25 mm (1 inch) in diameter that are to remain within the Highway limits shall be treated with an approved herbicide spray mixture by a Certified Pesticide Applicator and in accordance with State Board of Pesticides Control Regulations unless otherwise restricted by the DEP.

7. SCENIC AREAS

Certain lands are acquired or set aside for scenic enhancement and natural beauty. Such areas include Scenic Byways, scenic strips, overlooks, rest areas, recreation areas, wildlife and waterfowl refuges, historic sites, public parks, and landscaped areas. The Utilities Web Site indicates the designated state and federal Scenic Byways within the State of Maine.

To protect the aesthetic quality of these areas, new Utility installations are not permitted within scenic areas unless the following criteria are met: [23 CFR 645.209]

A. The installation does not require extensive removal or alteration of trees or other natural features visible to the Highway user, or impair the aesthetic quality of the lands.

B. New aerial installations are permitted only if:

1. Other locations or underground construction are not technically feasible, cost prohibitive or less desirable from a visual quality standpoint.

2. The design of the Proposed Installation gives adequate attention to the protection and preservation of the visual qualities of the area in location, materials and methods of construction.

C. Installations for Highway Purposes - All criteria set forth in Paragraphs A and B shall also apply to Utility Facilities needed solely for Highway purposes, such as continuous Highway lighting or services to a safety area, rest area or recreational area.

8. GENERAL LOCATION REQUIREMENTS

This section outlines the general requirements for all Facilities within the Highway limits. Additional standards that are specific to the type of Facility or the type of Right-of-Way are discussed in subsequent chapters.

1. Design/Construction

The Utility is fully responsible for the design of any of its Facilities to be installed within the Highway limits.

A. National Standards: All Facilities within the Highway limits must also comply with any applicable National Standards. Where those standards differ from what is stated herein, the higher degree of protection shall prevail.

B. Public Laws/Orders: Nothing in this rule is intended to interfere with the applicability or enforcement of any laws, rules, orders of the MPUC, or ordinances consistent with this policy. This specifically includes the Americans With Disabilities Act of 1990 [PL 101-336].

C. Design Life: All permanent Utility installations on, over, or under the Highway or attached to any Highway Structures shall be of durable materials designed for long service life expectancy with due consideration given to the overall needs of the Highway corridor. Facilities shall be designed to be relatively free from routine servicing and maintenance.

D. Uniform Alignment: Longitudinal installations shall be designed and installed on as uniform an alignment as possible to minimize potential conflicts and to aid in locating underground Facilities in the future.

E. Minimize Interference: Wherever possible, Facilities shall be located to minimize the possibility of interference with other Facilities or Highway work.

F. Crossings: To the extent feasible and practicable, Facility crossings of the Highway shall be generally perpendicular to the Highway alignment.

G. Permits: The Utility is required to secure all permits necessary for the installation, adjustment or maintenance of their Facilities.

H. Cooperation With Other Utilities: Throughout the design and installation of any Facilities within the Highway limits, Utilities must address the needs of all other Utilities with regard to their existing or Proposed Installations located in the vicinity of another Proposed Installation. This shall include maintaining sufficient offsets from other Facilities and assuring that all other Utilities have reasonable access to their own Facilities during construction. Where Utilities are unable to resolve conflicts in accordance with this policy, the Department shall make the final determination.

I. Clearance Between Facilities: The following defines the minimum clearance standards for Facilities within the Highway limits. Greater clearances are encouraged and may be required whenever possible. Utilities are encouraged to undertake joint construction whenever possible and the Department will generally issue an exception to these standards when all affected parties agree to a lesser requirement that is consistent with the applicable National Standard(s).

(1) Horizontal Clearance Between Longitudinal Facilities: Unless specifically permitted otherwise, a 900 mm (3 foot) minimum horizontal clearance shall be maintained between all underground Facilities. Measurement between underground Facilities shall be taken horizontally from the closest edge of the Facility. Aboveground pole lines (excepting crossings and services) shall also be included in this standard where those poles occupy a reasonably consistent offset. Measurement to a pole line shall be to the nearest face of pole or to the vertical plane established longitudinally through the center of the pole line between poles.

(2) Vertical Clearance Between Facilities: Where underground Facilities must cross; the angle of such crossing shall be as close to 90 degrees as possible, with a minimum vertical clearance of 300 mm (1 foot).

J. Erosion Control and Restoration of Vegetation: Utilities shall stabilize the soil in all work areas within the Highway limits to minimize erosion. Restoration of loam, grass or other landscaping vegetation is required following the completion of Backfill as soon as weather conditions and/or seasons of the year allow. Temporary mulch shall be used until permanent treatments can be applied.

2. Utility Corridors

To obtain consistency and maximize the use of the Highway, "preferred corridors" have been specified below for each type of Facility. In the process of establishing plans, Utilities are encouraged to utilize these corridors whenever practical.

Type of Utility Facility	Preferred Corridor
Water & Sewer Lines	Under the Traveled Way
Gas Lines	Under the Shoulder
Telephone/Electric Conduit	Under the Shoulder or Sidewalk
Direct-bury Communications	600 mm (2') from ES
Utility Pole Line	As close to R/W limit as practical

9. UNDERGROUND INSTALLATIONS

1. General

A. Depth of Cover

The minimum depth of Cover for any Facility within the right of way limits is 900 mm (36"). Additional requirements are specified herein for each type of Utility.

Any wires, pipes, conduits or cables that are presently located within the Highway limits at a depth of less than 300 mm (1 foot) and not specifically permitted to be at that depth, shall be relocated in accordance with this policy.

B. Encasement

Casings shall be used under Bridge approach slabs and in close proximity to Highway Structure footings. Due to the wide variety of designs and the differing schedules for construction or maintenance, the Department will need to determine Casing requirements near footings on a case-by-case basis. Where Encasement is to be employed in other areas, such Encasement shall be provided under center Medians and within the Pavement Structure limits to a point beyond the ditch line for cut sections, 1.5 m (5') beyond the toe of slope for fill sections, or 1.5 m (5') beyond the face of Curb on urban section roadways (including side streets). Exceptions for Encasement within a portion of the Median may be approved when excessive Median width or significant changes in the roadway cross-section make a continuous installation impractical.

C. Markers & Detection Aids

(1) Warning Tape: Upon installation, all underground Facilities installed by open cut shall include warning tape, of a color consistent with the APWA Uniform Color Code, located roughly 450 mm (18") directly above and parallel to the entire installation.

(2) Signs: All underground utilities crossing the entire Right-of-Way (from one boundary to the other) shall have a readily identifiable marker installed at each Right-of-Way line crossed to indicate the type of Facility, the name of the owner and a telephone number to call. Signs shall be maintained with current, legible information.

(3) Detection Aids: All nonmetallic underground Facilities shall include some metallic component installed directly above, below, or as an integral part of the Facility to aid in the future detection and location of the Facility.

D. Appurtenances

Aboveground Appurtenances installed as a part of an underground Facility shall be located in accordance with Section 10 - Aboveground Installations.

E. Methods of Installation

(1) Trenchless Installation Methods: All pits associated with Trenchless Installation Methods shall be located as far from the ETW as possible, preferably outside the Clear Zone. Pits shall be located and constructed so as not to compromise public safety or the integrity of any Highway Structure footings. The bottom of the roadway edge of all pits shall, at a minimum, be located beyond a line created by a 1:1 slope projected down from the ETW. The Division Engineer or Utilities Engineer may require the use of support structures to achieve the proper degree of protection.

(2) Blasting: 24 hours notice must be given to the appropriate MDOT Division Office prior to any blasting within the Highway limits. When blasting is to occur within 30 m (100') of a Highway Structure, prior approval must be obtained from the MDOT Bridge Maintenance Engineer. The Department may require that detailed plans and procedures prepared by a licensed blaster be submitted by the Utility. Pre-blast surveys may also be specified as a work condition.

(3) Pavement Cuts: Wherever pavement is to be cut, all edges shall be cut neat and reasonably straight.

(4) Backfill/Compaction: Backfill compaction shall equal that of the surrounding soil outside of the Pavement Structure limits. Within the Pavement Structure limits, Backfill and compaction requirements shall be in accordance with the Department's Standard Specifications for Highways and Bridges.

F. Locations of Installations

(1) Undesirable Locations: Locations in deep cuts, near footings of Bridges or retaining walls, within areas of Special Materials, across intersections at grade, across ramp terminals, or in areas where it will be difficult to attain minimum Cover shall be avoided whenever possible.

(2) Clearance from Highway Structures: Vertical and horizontal clearance between any Facility and a Highway Structure shall be sufficient to permit maintenance of both without interference. Clearances shall comply with Section 8(1)(I).

(3) Road Side of the Utility Pole Line: Unless sufficient Right-of-Way is not available, mainline underground Facilities should be installed on the Traveled Way side of the pole line.

(4) Additional Requirements: The location of any Facilities may be further restricted by the Utilities Engineer or Division Engineer to insure that a proposed Facility will not interfere with existing or currently planned Highway construction and/or maintenance activities.

(5) Highway Drainage Pipes: Highway drainage pipes and structures shall be protected during any Utility installation and maintenance. Utilization of existing drainage pipes as Sleeves is not permitted.

2. Gas, Liquid Petroleum, and Other Hazardous Transmittant Pipelines

A. Cover

Hazardous Transmittant pipelines shall have a minimum Cover of 900 mm (36").

B. Multiple Lines

In the event that a utility proposes to install two active Hazardous Transmittant pipelines along the same corridor, the two lines shall be placed one above the other, as reasonably vertical as practicable, considering safe operation and maintenance of the lines. The lower-pressure line shall be installed above the higher-pressure line and must meet the minimum cover requirements as specified in Section 9(2)(A).

C. Vents

One or more Vents shall be provided for each Casing or series of Casing. For Casing longer than 45 m (150') Vents shall be provided at both ends. On shorter Casing a Vent shall be located at the high end with a marker placed at the low end. Vents shall be placed at the Right-of-Way line immediately above the pipeline, situated so as not to interfere with Highway maintenance or be concealed by vegetation. Ownership of the lines and an emergency contact number shall be shown on the Vents.

D. Drains

Drains for Hazardous Transmittant pipelines will not be permitted to outfall into drainage ditches, natural watercourses or onto the Highway.

3. Water Lines

A. Cover

The minimum Cover for waterlines shall be 900 mm (36"). The Utility owner is responsible to assure that all waterlines are suitably protected against

freezing. All uninsulated water lines shall have sufficient Cover to exceed the depth of frost penetration.

B. Drains

Waterline Encasement or drains may be permitted to outfall into roadside ditches at locations approved by the Department.

4. Sanitary Sewer Lines

A. Cover

Reference "Water Lines", Section 9(3)(A).

B. Drains

Sanitary sewer line Encasement drains shall not outfall into drainage ditches, natural watercourses, or onto the Highway.

C. Manholes

Manholes serving sewer lines up to 600 mm (24") in diameter shall have a minimum inside diameter of 1,200 mm (48"). For any increase in line size or number of pipes, the inside diameter of the manhole may be increased a like amount. Manholes for large interceptor sewers should be specially designed, keeping the overall dimensions to a minimum. The outside diameter of the manhole chimney at the ground level shall not exceed 900 mm (36"). Any manholes allowed within the pavement shall be set flush with the pavement and will not be in the vehicular wheel path.

5. Electric Supply Lines

A. Cover

The minimum Cover for underground Electric Supply Lines within the Highway limits shall be 900 mm (36").

B. Conduit

All underground Electric Supply Lines within the Highway limits shall be in Conduit. Conduit shall be either steel or concrete encased.

C. Services

Underground Electric Supply Line services located within the Highway limits shall also be encased in a minimum of 100 mm (4 inches) of concrete in addition to complying with all other applicable standards specified herein.

D. Manholes

Manholes shall be limited to those necessary for installation and maintenance of underground lines. The elevation of manhole rims and covers

shall be set at finished grade. New manholes will not be permitted within the Traveled Way or Shoulder of a Highway except within urban areas.

To conserve space within the Right-of-Way for the needs of the Highway corridor, manhole vault dimensions should be no larger than is necessary to hold the equipment involved and for safety standards to be assured for maintenance personnel. Outside width should not exceed 2.1 m (7'), with the length held to a reasonable minimum. The outside dimensions of a manhole chimney should not exceed the minimum required to support the manhole frame and cover. Manhole covers (for personnel access) shall be installed flush with finished grade and shall not be in the vehicular wheel path. The top of the roof of the manhole vault shall be set to meet a minimum Cover of 900 mm (36 inches).

6. Communication Lines (Telephone, CATV, etc...)

A. Cover

The minimum Cover for underground Communication Lines within the Highway limits shall be 900 mm (36") for either encased or unencased installations.

B. Manholes

Section 9(5)(D) applies.

10. ABOVEGROUND INSTALLATIONS

1. General

A. Vertical Clearances

The vertical clearance of new overhead Utility lines above Highways and intersecting Public Ways shall be a minimum of 5.5 m (18'). When existing roadway elevations are increased, existing overhead Facilities that meet vertical clearances defined within applicable National Standards may be allowed to remain unless otherwise directed by the Department. New or adjusted overhead lines running parallel to the Highway and not crossing intersecting Public Ways shall have a minimum vertical clearance as defined within applicable National Standards.

B. Utility Poles

(1) Pole Construction: Utility poles within the Highway limits shall be single-pole construction.

(2) Multiple Pole Lines: Multiple Pole Lines are no longer permitted within the Highway limits. Stub poles or service poles that must be located within the Right-of-Way are not considered a separate pole line, but shall conform to all applicable offset criteria. Existing areas having Multiple Pole Lines shall be reduced to a single, joint use pole line whenever:

(a) the Department undertakes any construction project having a scope beyond a Pavement Overlay and existing poles are required to be relocated, or

(b) the Department determines a particular area to present a significant hazard to the traveling public.

If any Utility undertakes a project in an area with an existing Multiple Pole Line that is separate from a MDOT Project and consists of the replacement of ten or more consecutive poles, one of the following must occur:

(a) the owners of the aboveground Facilities must agree to combine their Facilities onto a single pole line as part of the proposed project, or

(b) the Utility undertaking the pole replacements must install poles of sufficient height to accommodate the other Facilities when they are upgraded

Existing Multiple Pole Lines, which involve Electric Supply Lines owned by different Utilities, will not be forced to combine onto a single pole line providing all offset criteria are met.

(3) Service Poles: Unless vertical clearances and the local terrain dictate otherwise, all poles used to exclusively provide service to a customer shall normally be installed at or beyond the Highway limits.

(4) Anchors: Utility pole anchors shall not be installed on the Traveled Way side of a pole unless located behind guardrail and in compliance with Section 10(2)(B)(1). Anchors shall be adequately designed and installed to enable shared-use whenever possible with standard utility equipment.

2. Offsets

Aboveground offsets define the horizontal clearance required to provide a Recovery Area and room for adequate Highway maintenance. Although specific offset values are defined herein, it is important to recognize that these offsets are minimum values. Greater setbacks (preferably in accordance with Clear Zone standards) should be provided whenever possible to provide improved safety and to minimize the potential for conflicts with future Highway construction. Unless otherwise noted, all offsets are to the portion of the aboveground Facility that is below a vertical height of 4 m (13 feet) and located closest to the Edge of Traveled Way.

Existing aboveground Facilities that are located within the limits of MDOT Projects with a scope greater than a Pavement Overlay shall be adjusted to meet the standards defined in this policy. Existing aboveground Facilities in other areas that do not presently meet the minimum offset standards may remain in place until the Department determines that those Facilities present a safety problem or otherwise conflict with the use, construction or maintenance of the Highway.

A. General

(1) Offset From Edge of Shoulder: Unless site-specific conditions pertaining to guardrail, curb or the "600 mm Rule" apply as described under Section 10(2)(B), no offset shall result in an aboveground Facility being located within 1.8 m (6 feet) from the Edge of Shoulder, regardless of whether the surface of the Shoulder is paved or unpaved.

(2) Fire Hydrants: Hydrants shall be of breakaway construction and generally located in accordance with the offsets defined herein. However, where local fire equipment presents limitations, the maximum offset possible may be used, providing it is in accordance with Section 10(2)(A)(1).

(3) Breakaway Devices: Aboveground Facilities may be permitted within the minimum offsets specified when authorized by the Department and when a breakaway system is utilized.

(4) Mid-Span Poles: New poles located between two existing poles may be permitted at lesser offsets than defined herein provided that the new pole is "in-line" with the two existing, adjacent poles and that the offset of the new pole is equal to or greater than the smallest offset of the adjacent poles.

B. Site-Specific Conditions

(1) Guardrail: For steel beam guardrail, aboveground Facilities shall be set back a minimum distance of 900 mm (3 feet) from the back of post. Where space permits, greater offsets are encouraged to facilitate snowplowing. Aboveground Facilities located behind cable guardrail shall be set back 3.6 m (12 feet) or in accordance with the offset standards without guardrail, whichever is less.

(2) Curb: In urban areas with posted speed limits of 56 kph (35 MPH) or less, aboveground Facilities may be installed 1.5 m (5 feet) behind the face of Curb. In locations where insufficient Right-of-Way or other restrictions are present and no other practical solution exists, the Department may elect to allow aboveground Facilities as close as 300 mm (1 foot) behind the face of Curb.

(3) Ditches: No aboveground Facilities shall be set in the Flow Area of a ditch. New Facilities installed in areas with ditches shall generally be installed behind the ditch and at least 600 mm (2 feet) up the Backslope (as measured horizontally) unless the offset of the ditch exceeds the required aboveground offset by at least 2.4 m (8 feet). Existing Facilities that meet offset standards in the Inslope of a ditch area may be permitted to remain in their present locations until replaced.

(4) Islands/Traffic Circles: Aboveground utilities are not permitted in the center island of a traffic circle or in traffic islands.

(5) Culverts: Aboveground Facilities are not permitted within 2.4 m (8') of the end of any culvert.

(6) Restricted Right-of-Way: If a Highway segment has not experienced 3 or more crashes relating to Utility installations in the past 3 years and there is insufficient Right-of-Way to attain the minimum offset requirements defined herein, the Department may elect to permit aboveground Facilities as close as practicable to the existing Right-of-Way limits.

(7) Urban Areas With No Curb: Aboveground offsets may be limited to that specified in Section 10(2)(A)(1), *Offset From Edge of Shoulder*, in urban areas with speed limits of 56 kph (35 MPH) or less when Curb is not present.

(8) MDOT Projects

(a) **Resurfacing Projects:** Offsets for existing aboveground Facilities may be limited to 3m (10') from the Edge of Traveled Way or as stated in 10(2)(A)(1), *Offset From Edge of Shoulder*, whichever is greater, whenever the Department undertakes a Highway project with a Pavement Overlay scope.

(b) **"600 mm Rule":** When aboveground offsets are reviewed for compliance in conjunction with a MDOT Project, the Department may elect to allow a Facility to remain at an offset of up to 600 mm (2 feet) less than the required minimum providing the existing location complies with the following:

(i) The existing Facility does not conflict with the Highway construction or any of the permanent Highway features;

(ii) The existing Facility does not conflict with any other standard defined in this policy.

C. Corridor Offsets

The following defines the standard offsets that apply to a given corridor whenever the site-specific conditions described in Section 10(2)(B) are not applicable. Maps that identify the classification of all state and state-aid Highways are available on the Utilities Web Site.

(1) National Highway System (NHS)

The aboveground offset standards applicable to all non-breakaway Facilities along Highways in the National Highway System shall comply with Clear Zone standards.

(2) State Standards Tables (Non-NHS Highways)

The following tables define the minimum offsets for all aboveground Facilities located along rural, non-NHS Highways. These standards are based upon the classification of the Highway and the highest AADT anticipated within the life of the Facility.

Minor Collector Highways

Design Year AADT	Paved Width	Typical Section m (ft.)	Min Pole Offset (from ETW)
Under 1000	7.2 (24 ft.)	3.6 - 3.6 (12 - 12) ETW at: 3 (10)	**2.5 m (8 ft.)**
1000 to 4000	8.4 (28 ft.)	4.2 - 4.2 (14 - 14) ETW at: 3.3 (11)	**2.7 m (9 ft.)**
Over 4000	*Ref. Major Coll.*	*Ref. Major Coll.*	***Ref. Major Coll.***

Major Collector Highways

Design Year AADT	Paved Width	Typical Section m (ft.)	Min Pole Offset (from ETW)
Under 1000	7.2 m (24 ft.)	3.6 - 3.6 (12 - 12) ETW at: 3 (10)	**3 m (10 ft.)**
1000 to 4000	8.4 m (28 ft.)	4.2 - 4.2 (14 - 14) ETW at: 3.3 (11)	**3 m (10 ft.)**
4000 to 6000	9 m (30 ft.)	4.5 - 4.5 (15 - 15) ETW at: 3.3 (11)	**3 m (10 ft.)**
Over 6000	11 m (36 ft.)	1.9 -7.2 -1.9 (6 - 24 - 6) ETW at: 3.6 (12)	**4.5m (15 ft.)**

Minor Arterial Highways

Design Year AADT	Paved Width	Typical Section m (ft.)	Min Pole Offset (from ETW)
Under 1000	8.6 m (28 ft.)	4.3 – 4.3 (14 - 14) ETW at: 3.3 (11)	**3 m (10 ft.)**
1000 to 6000	*Ref. Major Coll.*	*Ref. Major Coll.*	***Ref. Major Coll.***
6000 to 8000	11 m (36 ft.)	1.9 -7.2 -1.9 (6 - 24 - 6) ETW at: 3.6 (12)	**6 m (20 ft.)**
Over 8000	12.2 m (40 ft.)	2.5 – 7.2 – 2.5 (8 - 24 - 8) ETW at: 3.6 (12)	**6 m (20 ft.)**

11. CONTROLLED ACCESS HIGHWAYS

For the purposes of this policy, Controlled Access Highways are separated into two categories: Freeways and non-Freeways.

1. Freeways

A. New Utility Installations Along Freeways

New Facilities will not normally be permitted longitudinally within Freeway COA. Where special circumstances exist, the Department may elect to permit such installations under strictly controlled conditions.

Where such longitudinal installations are requested, the Utility must demonstrate to the Department's satisfaction:

(1) That the accommodation will not adversely affect Highway and traffic safety.

(2) That alternate locations are not available or cannot be implemented at reasonable cost, from the standpoint of providing efficient service in a manner conducive to safety, durability, and economy of maintenance and operations; that the accommodation will not adversely affect the design, construction operation, maintenance, or stability of the Freeway; and that it will not interfere with or impair the present use or future expansion of the Freeway.

(3) That the accommodation satisfies the conditions of Section 11(1)(D), *Access for Constructing and/or Servicing Utilities*.

All longitudinal accommodations as may be warranted herein shall only be in accordance with a valid Location Permit. Where longitudinal installations must traverse interchange areas, they shall be located and treated in the same manner as Utility crossings within interchange areas, as in Section 11(1)(C).

Service connections to adjacent properties shall not be permitted from longitudinal installations located within the Freeway COA.

B. Existing Facilities Along Proposed Freeways.

Where a Facility already exists within the proposed Right-of-Way of a Freeway and it can be serviced, maintained and operated without access from the through traffic roadways or ramps, it may remain as long as it does not adversely affect the safety, design, construction, operation, maintenance or stability of the Freeway. Otherwise, it must be relocated, except for special cases as covered by Section 11(1)(A).

C. Facilities Crossing Freeways

New Facilities and adjustments or relocations of existing Facilities may be permitted to cross a Freeway. To the extent feasible and practicable they should cross on a line generally normal to the Freeway alignment and preferably under the Freeway.

(1) Facilities Along Roads or Streets Crossing Freeways

Where a Facility follows a crossroad or street that is carried over or under a Freeway, provision should be made for the Facility to cross the Freeway on the locations of the crossroad or street in such manner that the Facility could be constructed and/or serviced without access from the through-traffic roadways or ramps. Generally the Facilities are to be located within the Right-of-Way of the crossroad or street, existing or relocated, and may cross over or under the Freeway or be carried on or through the grade separation structure, provided installation and servicing thereof can be accomplished without access from the through-traffic roadways or ramps. Where distinct advantage and appreciable cost saving is effected by locating the Facilities outside the Right-of-Way of the crossroad or street they may be so located, in which case they shall be located and treated in the same manner as overhead Facilities crossing the Freeway at points removed from grade separation structures as in subparagraphs (2) and (3) which follow.

(2) Overhead Facility Crossings

Overhead Facilities crossing a Freeway at points removed from grade separation structures, or those crossing near a grade separation but not within the Right-of-Way of a crossroad or street, in general, should be adjusted so that supporting structures are located outside the COA. In any case supporting poles shall:

(a) Not be placed within the appropriate Clear Zone.

(b) Not be located within a Median of 24 m (80') or less in width.

(c) Not impair sight distance from any point on the through roadway or ramps.

The vertical clearance to overhead Facilities crossing Freeways shall be the greater of 6 m (20') or as required by the National Electrical Safety Code, ANSI C2, Institute of Electrical and Electronics Engineers, Inc.

(3) Underground Facility Crossings

Facilities crossing underground below the Freeways shall be of durable materials and so installed as to virtually preclude any necessity for disturbing the roadways to perform maintenance or expansion operations. The design and types of materials shall conform to appropriate National Standards. Manholes and other points of access to underground utilities shall be located outside the Right-of-Way limits.

(4) Provisions for Expansion of Facilities

When existing Facilities are relocated or adjusted in conjunction with construction of a Freeway, provisions may be made for known and planned expansion of the Facilities, particularly those underground. They should be planned to avoid interference with traffic at some future date when additional or new overhead or underground Facilities are installed.

D. Access for Constructing and/or Servicing Facilities

In general, Facilities are to be located and designed in such a manner that they can be constructed and/or serviced without direct access from the through roadways or connecting ramps. Such direct access shall not be permitted except for special cases where alternate locations and/or means of access are unavailable or impractical due to terrain and/or environmental constraints, and such use will not adversely affect safety or damage any part of the Highway. Where direct access is requested, a permit must be obtained from the Department.

Access for construction and/or servicing a Facility along or across a Freeway should be limited to access via (a) frontage roads where provided, (b) nearby or adjacent public roads and streets, or (c) trails along or near the Highway, connecting only to an intersecting road, from any one or all of which entry may be made to the outer portion of the Freeway Right-of-Way. Subject to 23 CFR 111, a locked gate along with COA fence may be utilized to meet periodic service access needs. Where a gate is allowed, it will be documented by an approved permit that will include adequate provisions against unauthorized use.

In those special cases where supports, manholes, or other Appurtenances are located in Medians, interchange areas, or otherwise inaccessible portions of Freeway Rights-of-Way, access to them from through-traffic roadways or ramps may be permitted when other alternatives do not exist. Such access shall be by permit setting forth the conditions for policing and other controls to protect Highway users.

Entry to the Median area should be restricted where possible to nearby grade separation structures, stream channel crossings, or other suitable locations not involving direct access from through roadways or ramps.

Where Facilities are located outside the COA line and where such Facilities may require maintenance from within the Freeway Right-of-Way, a permit must be obtained from the Department.

All permits shall include adequate provisions for COA to the Utility work zone, direction of traffic and protection of workers and the traveling public. Advance arrangements should also be made between the Utility and the Department for emergency maintenance procedures.

E. Manner of Making Utility Installations and Adjustments

In general, Utility installations and adjustments are to be made with due consideration to Highway and Utility costs and in a manner that will provide maximum safety to the Highway users, will cause the least possible interference with the Highway facility and its operation, and will not increase the difficulty of or cost of maintenance of the Highway.

2. Non-Freeways

Non-Freeway Controlled Access can vary from small segments along a Highway to entire corridors, such as a bypass. In general, Facilities within these Controlled Access areas will be treated in the same manner as Freeways. However, based upon the specific conditions involved, the Department may consider allowing longitudinal installations.

A list of Non-Freeway Controlled Access areas is available on the Utilities Web Site.

12. BRIDGES AND OTHER HIGHWAY STRUCTURES

1. General

Where other arrangements are not feasible, the Department will consider permitting attachment of Facilities on Highway Structures. Each such attachment will be considered on an individual basis and permission to attach will not be considered as establishing a precedent for granting subsequent requests for attachment. The following requirements are established for attachment to any Highway Structure:

A. *P.E. License & Certification:* A Maine Licensed Professional Engineer shall design all proposals for attachments to Highway Structures in accordance with the latest AASHTO standards. In the case of Bridges, Each design proposal shall be fully evaluated in accordance with the latest edition of AASHTO *LRFD Bridge Design Specifications* or AASHTO *Standard Specifications for Highway Bridges, 16th edition* and the Maine Department of Transportation Bridge Design Manual (as applicable) to assess the effect of the attachment(s). A statement certifying that the additional loading will not exceed allowable limits is required as part of the design submittal.

B. *Out-of-Service Facilities:* All Facilities that are taken out-of-service shall be removed in accordance with Section 6(4). If any such Facilities are not removed, the Department may elect to remove such Facilities at the Utility's expense.

C. *Other Applicable Permits:* Utilities are responsible for acquiring any and all permits that may be applicable to their proposed work. Some of the applicable permits may include:

(1) *Coast Guard Permits:* A Coast Guard permit or notification may be required whenever the proposed work will occur over a navigable waterway.

(2) *Railroad Permits:* Work permits may be required for any work done over, under or near a Railroad and are obtained directly from the Railroad Company.

(3) *Environmental Permits:* Permits may be required by the Natural Resources Protection Act (NRPA) administered through the Department of Environmental Protection (DEP), Shoreland Zoning, Army Corp. and others.

D. *Identification Tag:* A permanent tag shall be affixed to each end of the attached Facility identifying the owner of the Facility, the type of attachment, and a contact telephone number. All tags shall be maintained in a legible condition with current information.

E. *Electric Supply Lines /Communication Lines:* Communication and Electric Supply Lines shall be suitably insulated, grounded, and carried in protective Conduit or pipe from the point of attachment to the point of exit per applicable National Standards.

F. *Hazardous Transmittants:* Mutually Hazardous Transmittants shall be isolated by compartmentalizing or by auxiliary Encasement of incompatible carriers. This shall include Electric Supply Lines.

G. *Casing Vents:* Where a pipeline on or in a structure is encased, the Casing shall be effectively opened or Vented at each end to prevent possible buildup of pressure and to detect leakage of gases or fluids.

H. *Unencased Attachments:* Where a Casing is not provided for a pipeline on or in a structure, additional protective measure shall be taken, such as employing a higher factor of safety in the design, construction and testing of the pipeline than would normally be required for encased construction.

I. *Pipeline Shutoffs:* Pipeline shutoffs, preferably automatic, shall be required within close proximity of attachments unless other sectionalizing devices can isolate segments of the lines. Shutoff valves shall be located on both sides of a Highway Structure footing.

J. *Brackets/Bolt Material:* For painted steel structures, all brackets and bolt material in contact with the structure shall be hot-dipped galvanized. For weathering steel (ASTM A588, A709, etc...), all brackets and bolt material shall also meet an applicable ASTM weathering steel designation.

K. *Connection Type:* All attachments shall be bolted. Bolt holes are normally drilled 1.5 mm (1/16) of an inch larger than the bolt diameter.

L. *Welding:* Welding to steel components is not permitted.

2. Bridges

The following standards are specific to Bridges and in addition to the General Standards listed above.

A. General

(1) *First Girder/Beam:* All Facilities attached to a Bridge shall not be located outside the first girder or beam.

(2) *Precast & Truss Bridges:* Attachments that are not incorporated in the original Bridge design will not be permitted on either precast concrete Bridges or on the main truss members of a truss Bridge.

(3) *Vertical Clearances:* Vertical clearances for any Highway or Railroad overpasses or for Bridges over navigable waters shall not be reduced.

(4) *Conduits in New Bridges:* When a request is made during the design phase of a proposed Bridge, the Department may allow Conduits to be incorporated into the construction of the Bridge. The Utility will be responsible for the additional costs relating to such accommodation.

B. Connection Requirements

(1) *Flanges/Webs:* Drilled holes in the web area, which are located at least 150 mm (6 inches) from the flanges, are permitted. Attachments to the flanges are not permitted.

(2) *Diaphragms:* For any attachments located between two steel beams, replacement of the diaphragms with Utility support brackets may be permitted, provided the replacement is equal in strength to the original.

(3) *Holes through Abutments:* Any holes through concrete abutments shall be core drilled and sealed with a waterproof seal, such as a link seal, to prevent water leakage.

(4) *Approach Slabs:* Cutting through concrete approach slabs may be permitted providing the slab is repaired to achieve the same strength as the original design.

(5) *Electric Supply Lines /Communication Lines:* Buried cable shall be carried to a manhole located beyond the backwall and/or approach slabs of the Bridge. Carrier and Casing pipe should be suitably insulated from Electric Supply Line attachments.

(6) *Clearances:*

(a) A minimum offset of 300 mm (12") from any point on the main carrying members (flanges & webs) and substructure units (foundations) to the edge of the outer face of the pipe or insulation is required. Additional clearance may be required for smaller beams or utilities over 300 mm (12 inches) to ensure adequate access for future maintenance.

(b) Brackets shall be located a minimum of 150 mm (6") above the bottom flange of the steel beams to allow sufficient clearance for rolled staging.

(c) A minimum 600 mm (2') clearance is required on at least one side of any Utility attachment located between beams to allow access for maintenance.

(d) Any attachments to concrete members (such as abutments, piers, and concrete slab superstructures) require a minimum 300 mm (12") clearance.

3. Buried Highway Structures

1. *Clearance:* For buried Highway Structures, the preferred location for any Facilities is at the edge of the right of way or at least 4.5 m (15 feet) upstream or downstream from the end of the structure. If it is not possible to be located in this manner and the Facility must be buried in the roadway, a 300 mm (12 inch) vertical clearance from the structure to the Facility is required.

2. *Additional Design Requirements:* All Facilities must be located and designed to allow reasonable replacement of Highway Structures. In most cases, excavation slopes will be at least 1.5:1. For example: a 3 m (10 foot) pipe with 1 m (3 feet) of fill will necessitate an excavation width at the roadway surface of at least 15 m (50 feet) in length. Facilities installed within such areas shall be designed and constructed with due consideration given toward providing temporary support of the Facility during replacement or repair of the Highway Structure.

13. EXCEPTIONS & APPEALS

1. Exceptions

The Department may authorize an exception to any provision of this manual whenever it determines that an exception will best serve the purpose of Highway corridor or that compliance with the requirement would be unduly burdensome and granting the exception would not undermine the purpose of this rule. Some considerations that may contribute to such a decision include:

A. Application of the standards presents an exceptional hardship or unreasonable cost under the circumstances;

B. A unique situation exists which could not have been anticipated or considered in the development of this policy;

C. All affected parties, as determined by the Department, jointly agree to a lesser requirement that is supported by applicable National Standards; or

D. The requirements stated herein exceed the limits of the available Highway corridor.

In instances where a Utility initiates a request for an exception, the Department may require supporting documentation that any other location is extremely difficult and unreasonably costly to the consumer, and that the installation will not adversely affect the design, construction, stability, traffic safety or operation of the highway.

2. Appeals

The Utility has the right to appeal a negative finding for an exception. All appeals shall be submitted in writing to the Utility Engineer, detailing the reason for the exception and specifically requesting an appeal to the previous finding. The Department will review the request and a final decision will be issued in writing.

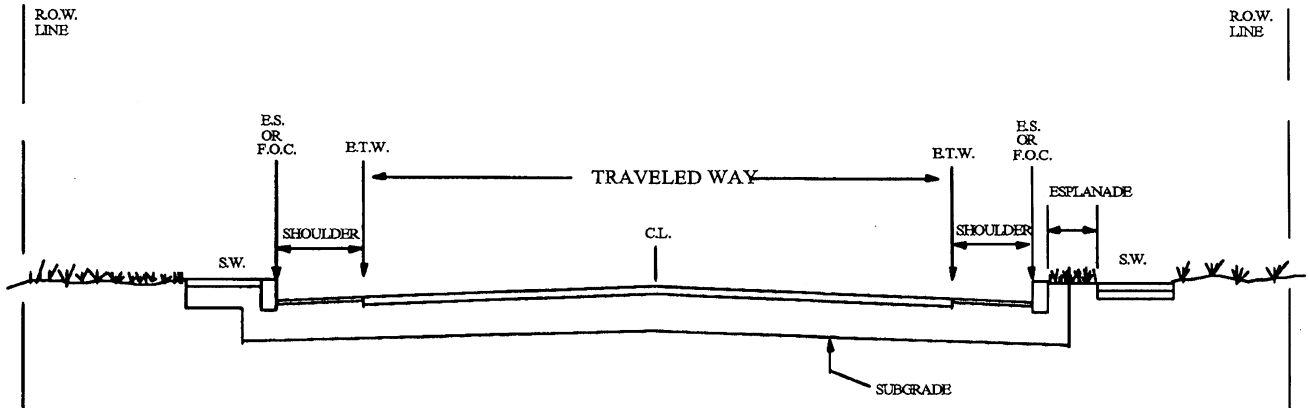
3. FHWA Approval

Requests for exceptions on Scenic Byways, the NHS, or other areas involving federal aid may be subject to FHWA approval

APPENDIX

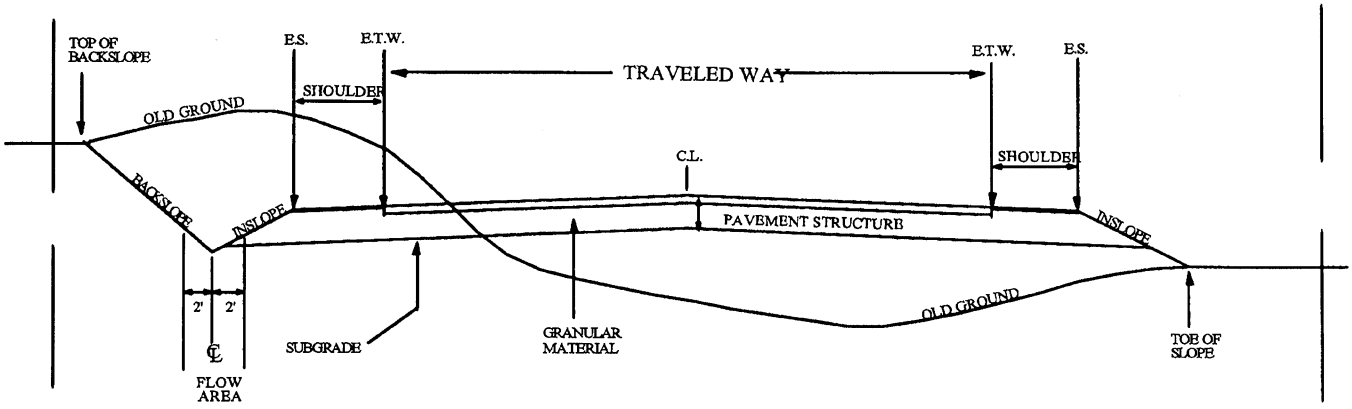
Typical Cross Section Elements

TYPICAL CROSS SECTION ELEMENTS



URBAN

HIGHWAY



RURAL